

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 3, 4, 6-13, 17, 21, and 44. Please cancel claims 5 and 40-43. Please add new claims 46 and 47. Claims 35-39 were canceled in a previous paper. No new matter is believed to be introduced by the aforementioned amendment. The following listing of claims will replace all prior versions and listings of claims in the application.

1. **(Currently amended)** A system for monitoring the power output of a light source, comprising:

a light source for providing a light beam;

an optical lens positioned in the light beam, the optical lens having an input surface generally facing the light source and an output surface generally facing away from the light source, the optical lens further having ~~[[a]]~~ first and second reflective surface that covers less than half of the surface area of the input surface of the lens surfaces; and

a photo detector generally facing the input surface of the lens, wherein the first reflective surface of the lens is adapted to reflect ~~at least~~ a first portion of the light beam toward the photo detector and the second reflective surface of the lens is adapted to reflect a second portion of the light beam toward the photo detector.

2. **(Original)** The system of claim 1 further comprising:

a controller coupled to the photo detector and the light source, the controller receiving a signal from the photo detector that is indicative of the amount of light detected by the photo detector, the controller being adapted to provide a control signal to the light source that adjusts the power of the light source so that the signal from the photo detector is relatively constant.

3. **(Currently amended)** The system of claim 1 wherein the first and second reflective ~~surface is~~ surfaces are provided on the input surface of the lens.

4. **(Currently amended)** The system of claim 3 wherein each of the first and second reflective ~~surface~~ surfaces is a concave surface on the input surface of the lens.

5. **(Canceled)**

6. **(Currently amended)** The system of claim ~~[[5]]~~ 4 wherein the optical lens is an aspheric lens with the first and second concave reflective ~~surface~~ surfaces molded ~~therein~~ on the input surface of the lens.

7. **(Currently amended)** The system of claim 3 wherein the light beam illuminates an illumination pattern on the input surface of the optical lens, wherein the illumination pattern has a central axis and an outer perimeter, the first and second reflective ~~surface~~ surfaces extending from at or near the center axis of the illumination pattern to at or near the outer perimeter of the illumination pattern.

8. **(Currently amended)** The system of claim 1 wherein the first reflective surface is adapted to focus ~~at least part of the reflected light~~ the first portion of the light beam onto the photo detector and the second reflective surface is adapted to focus the second portion of the light beam onto the photo detector.

9. **(Currently amended)** The system of claim 1 wherein the first reflective surface has a rectangular shaped perimeter.

10. **(Currently amended)** The system of claim 1 wherein the first reflective surface has a circular shaped perimeter.

11. **(Currently amended)** The system of claim 1 wherein the first reflective surface has an oval shaped perimeter.

12. **(Currently amended)** The system of claim 1 wherein the first reflective surface has an annular shaped perimeter surrounding an at least partially transmissive surface of the lens.

13. **(Currently amended)** The system of claim 1 wherein each of the first and second reflective ~~surface~~ surfaces includes a coating of a reflective material.

14. **(Original)** The system of claim 13 wherein the coating includes a noble metal.

15. **(Original)** The system of claim 1 wherein the light source and photo detector are positioned adjacent to one another, and the optical lens is spaced from both the light source and photo detector.

16. **(Original)** The system of claim 15 further comprising an optical fiber, wherein the optical lens is adapted to couple at least part of the light beam from the light source into the optical fiber.

17. **(Currently amended)** The system of claim 1 wherein the first reflective surface reflects less than 25% of the power in the light beam that is provided by the light source.

18. **(Original)** The system of claim 1 wherein the light source includes a vertical cavity surface emitting laser (VCSEL).

19. **(Original)** The system of claim 1 wherein the light source includes a Light Emitting Diode (LED).

20. **(Original)** The system of claim 1 wherein the photo detector includes a photodiode.

21. **(Currently amended)** The system of claim 1 wherein the light source has a numerical aperture that is dependent upon one or more operating conditions, the first and second reflective ~~surface~~ surfaces being configured to reflect a relatively constant percent of the power of the light beam provided by the light source over a range of numerical apertures of the light beam.

22. **(Previously presented)** A lens comprising:

an input surface comprising:

an input transmissive part for passing a portion of an incident light beam;

and

an input reflective part for reflecting a portion of the incident light beam to a first external device before passage of the light beam through the lens, the input reflective part being substantially non-transmissive; and

an output surface comprising:

an output transmissive part for passing a portion of a refracted light beam; and

an output reflective part for reflecting a portion of the refracted light beam to a second external device after passage of the refracted light beam through the lens, the output reflective part being substantially non-transmissive.

23. **(Previously presented)** The lens of claim 22 wherein the input reflective part covers less than half of the surface area of the input surface.

24. **(Previously presented)** The lens of claim 23 wherein the input reflective part covers less than 25% of the surface area of the input surface.

25. **(Previously presented)** The lens of claim 23 wherein the input reflective part reflects less than 25% of the power of the light that is incident on the input surface.

26. **(Previously presented)** The lens of claim 22 wherein the input reflective part is integral with the lens.

27. **(Previously presented)** The lens of claim 22 wherein the input reflective part is concave, and the input transmissive part is convex.

28. **(Previously presented)** The lens of claim 22 wherein the input surface is an aspheric surface and the input reflective part is molded into the input surface.

29. **(Previously presented)** The lens of claim 22 wherein one of the input and output reflective parts is coated with a reflective metal.

30. **(Original)** The lens of claim 29 wherein the reflective metal is a noble metal.

31. **(Previously presented)** The lens of claim 22 wherein the input reflective part has a substantially annular shape.

32. **(Previously presented)** The lens of claim 22 wherein the input reflective part has a substantially circular shape.

33. **(Previously presented)** The lens of claim 22 wherein the input reflective part has a substantially oval shape.

34. **(Previously presented)** The lens of claim 22 wherein the input reflective part has a substantially polygon shape.

35-43. **(Canceled)**

44. **(Currently amended)** ~~The system for monitoring as defined in claim 43, wherein~~ A system for monitoring the power output of a light source, comprising:

a light source that provides a light beam;

a first photo detector;

a second photo detector; and

a lens positioned to receive the light beam, the lens including an input surface and an output surface, the input surface including a first reflective portion that reflects a first portion of the light beam away from the lens and toward the photo detector, wherein the first reflected portion of the light beam does not pass through the lens, the lens further includes including a second reflective portion configured to reflect a second portion of the light beam toward the second photo detector.

45. **(Previously presented)** The system for monitoring as defined in claim 44, wherein the second reflective portion is included on the output surface of the lens.

46. **(New)** The system of claim 1 wherein the first and second reflective surfaces are provided on the output surface of the lens.

47. **(New)** The system of claim 16, wherein the optical fiber is butt coupled to the output surface of the optical lens.